



*The version you're consulting is not definitive. This programme still may change. The final version will be published on 1th June.*

**At Louvain-la-Neuve - 180 credits - 3 years - Day schedule - In French**

 Dissertation/Graduation Project : **NO** - Internship : **NO**

 Activities in English: **YES** - Activities in other languages : **NO**

 Activities on other sites : **NO**

 Main study domain : **Sciences économiques et de gestion**

 Organized by: **Faculty of Economic, Social and Political Sciences and Communication (ESPO)**

 Programme acronym: **INGE1BA** - Francophone Certification Framework: 6

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## **INGE1BA - Introduction**

### **Introduction**

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## INGE1BA - Teaching profile

### Learning outcomes

To pursue the Master's in Business Engineering and, at the end of the Master's program, "Become the innovative and responsible leaders that our economies need, capable of managing complex human and technical systems on a national or international scale, in the context of ecological transition, digital transformation, and societal changes," this is the challenge that the Bachelor's student in Business Engineering prepares to meet.

This program enables the student to progressively acquire the essential knowledge and skills to best prepare for the role of decision-maker within an organization (both commercial and non-commercial), integrating a role of interface and dialogue between management professions, science and technology professions, and quantitative methods.

To achieve this, the Bachelor's program in Business Engineering enables the student to acquire a broad foundation of knowledge and skills in the fields of science, technology, economics, and management, with a particular focus on ecological transition, digital transformation, and societal changes.

The graduate of the Bachelor's program will have developed their capacity for reflection, critical analysis, and mastery of tools oriented towards decision-making, with an anchoring in economic and organizational realities, through active pedagogy based on the study of concrete and current issues. This also includes the development of skills for autonomous and teamwork, specific communication abilities, creativity, and responsible innovation.

In addition, as with any Bachelor's graduate from the Faculty of Economic, Social, Political, and Communication Sciences (ESPO), the graduate will have developed:

- a multidisciplinary approach enabling them to question a phenomenon or issue related to the field of human sciences in a precise and well-founded manner, integrating the issues of sustainability and equity;
- a university approach based on scientific research and a rigorous and critical methodology, adapted to contemporary challenges;
- communication skills in French and in two foreign languages, essential in a globalized and digital world;
- a mode of thinking concerned with respecting ethical, civic, and environmental values.

During the three years of the Bachelor's program, the graduate will have demonstrated increasing autonomy and an increased sensitivity to the challenges of ecological transition and digital transformation. They will have developed their educational project, and at the end of their Bachelor's program, will engage in a specific Master's program, while keeping in perspective the construction of their personal and professional project, anchored in the realities of a rapidly changing world facing major challenges.

On successful completion of this programme, each student is able to :

#### **Comme tout bachelier de la Faculté des sciences économiques, sociales, politiques et de communication :**

AAC1. Maîtriser et mobiliser les savoirs fondamentaux (connaissances, modèles, théories, concepts) de la discipline (ou des disciplines) située(s) au cœur de son orientation d'études et de ses domaines d'application, pour comprendre l'être humain en société et l'ensemble des relations, organisations et institutions auxquelles il participe.

AAC1.1. Démontrer une connaissance et une compréhension critique du socle de savoirs approfondis (connaissances, modèles, théories, concepts) de la discipline (ou des disciplines) de son orientation (autrement dénommée sa « majeure » sur le site de Louvain-la-Neuve) et de ses domaines d'application.

AAC1.2. Comprendre, expliciter et analyser de manière critique, à l'aide du socle de savoirs de la discipline (des disciplines), différentes problématiques propres à son orientation.

AAC2. Maîtriser et mettre en œuvre les premiers jalons d'une démarche universitaire (démarche de recherche scientifique et méthodologique rigoureuse) située sur le plan épistémologique pour approfondir des questionnements/phénomènes relatifs à la (aux) discipline(s) de son orientation.

- Situer toute connaissance produite sur le plan épistémologique (AAC2.1. et AAC2.2.).
- Faire preuve de la maîtrise des premiers jalons d'une démarche scientifique et méthodologique de recherche rigoureuse (AAC2.3. à AAC2.6.).

AAC2.1. Adopter un recul critique sur les savoirs, sur les processus d'élaboration des savoirs, et sur des pratiques dans le domaine de son orientation.

AAC2.2. Mettre en discussion différents paradigmes (ou approches conceptuelles) pour approcher, interpréter et analyser (débattre) un(e) phénomène/question relatif(ve) à la discipline de son orientation.

AAC2.3. Identifier et sélectionner les publications et les méthodes appropriées (en questionner la validité et la pertinence) pour analyser une question relative à la (aux) discipline(s) de son orientation.

AAC2.4. Développer une analyse critique et réflexive de l'information et des publications (en français et en anglais), auxquelles l'étudiant sera confronté dans sa vie universitaire, et en réaliser une synthèse pertinente, conforme aux règles de base de la communication scientifique, en regard de la question qui est étudiée.

AAC2.5. Maîtriser et appliquer de manière rigoureuse les méthodes qualitatives et quantitatives principales relative à la (aux) discipline(s) de son orientation.

AAC2.6. Mener un travail de réflexion autonome et personnel : élaborer une analyse informée, un raisonnement argumenté et un jugement personnel fondé.

AAC3. Elaborer une réflexion personnelle en mobilisant les apports (théories, concepts, démarches...) de différentes disciplines pour questionner et discuter de manière rigoureuse et ouverte un(e) phénomène/question relatif(ve) au domaine des sciences humaines.

AAC3.1. Démontrer une connaissance et une compréhension critique des concepts et théories clés des principales disciplines des sciences humaines et sociales (entre autres : économie, philosophie, droit, histoire, socio-anthropologie, sciences politiques, gestion).

AAC3.2. Approcher, questionner et discuter un(e) phénomène/question relatif(ve) au domaine des sciences humaines en articulant différents angles d'analyse disciplinaires et en veillant à adopter une posture critique et nuancée vis-à-vis des limites de chaque discipline et de leurs interrelations.

AAC3.3. Démontrer une connaissance et une compréhension critique de savoirs approfondis dans d'autres disciplines que celles de son orientation (discipline(s) relative(s) à son choix de mineure pour les programmes organisés à Louvain-la-Neuve).

AAC4. Communiquer et collaborer, en français et dans deux langues étrangères, tant à l'oral qu'à l'écrit, en s'adaptant à ses interlocuteurs et au contexte en vue de pouvoir s'insérer dans un contexte international.

AAC4.1. Communiquer, à l'oral et à l'écrit sur des sujets complexes (des informations, des réflexions, des conclusions ainsi que les connaissances et principes sous-jacents) de façon claire, structurée, argumentée selon les standards de communication spécifiques au contexte et en adaptant sa présentation au public visé et aux intentions poursuivies.

AAC4.2. Pour 2 langues étrangères\* (anglais et néerlandais ou allemand ou espagnol) : communiquer à l'oral et à l'écrit de façon claire, cohérente, argumentée et avec aisance sur des sujets d'ordre général ou relatifs au domaine d'études ; Percevoir les différences et similitudes entre la culture cible (relative à la langue concernée) et la culture d'origine ainsi qu'utiliser des stratégies appropriées pour établir le contact avec des locuteurs de la culture cible.

\* Pour l'anglais (toutes les compétences langagières), Niveau B2 du cadre européen commun de référence.

Pour le néerlandais, l'espagnol ou l'allemand : certaines compétences langagières au Niveau B1 et certains au Niveau B2 du cadre européen commun de référence.

AAC4.3. Travailler en équipe : interagir, collaborer et s'organiser efficacement au sein d'une équipe et gérer les relations de groupe.

AAC4.4. Adopter une attitude de dialogue efficace et respectueuse en ajustant le mode de communication en fonction de l'interlocuteur (pairs, enseignants, personnel administratif, monde socio-professionnel) et en faisant preuve de capacité d'écoute, d'empathie et d'assertivité.

AAC5. Agir en autonomie, en acteur critique et responsable soucieux du respect de valeurs éthiques et citoyennes et en ayant construit son projet de formation en perspective de la poursuite de son développement personnel et professionnel.

AAC5.1. Faire preuve d'autonomie dans son parcours de formation : gérer de manière autonome son travail (définir les priorités, anticiper et planifier l'ensemble de ses activités dans le temps), faire preuve de recul critique sur ses propres acquis, ses méthodes d'apprentissage et ses productions et intégrer de manière autonome de nouvelles connaissances et compétences en réponse à des situations balisées.

AAC5.2. Mobiliser de manière critique les connaissances acquises afin de prendre position et d'agir de manière responsable en étant soucieux de valeurs éthiques et citoyennes.

AAC5.3. Se construire un projet de formation et s'orienter vers un projet professionnel « éclairé » : se projeter dans un master en continuité avec la discipline de son orientation (ou au besoin dans une réorientation raisonnée) en ayant identifié les thématiques et des domaines dans lesquels le futur diplômé souhaiterait s'insérer professionnellement.

#### **Plus spécifiquement, en tant que bachelier en ingénieur de gestion :**

AAS1. Maîtriser de manière active un socle de savoirs de différentes disciplines (sciences de gestion, méthodes quantitatives, sciences économiques, sciences et technologies, sciences humaines, droit) indispensables pour analyser des problématiques dans les différents domaines du management.

AAS1.1. Maîtriser les concepts fondamentaux et les théories de base dans chacun des domaines du management (finance, marketing, recherche opérationnelle, ressources humaines, stratégie, etc).

AAS1.2. Maîtriser un socle de savoirs dans le domaine des sciences humaines, et plus spécifiquement les sciences économiques.

AAS1.3. Maîtriser un socle de savoirs dans le domaine des mathématiques, des méthodes quantitatives en économie et gestion, ainsi qu'en informatique / algorithmique.

AAS1.4. Maîtriser un socle de savoirs dans le domaine du droit, et plus spécifiquement les règles législatives qui régissent toute activité économique.

AAS1.5. Maîtriser un socle de savoirs dans le domaine des sciences et technologies (chimie, physique et applications technologiques).

AAS1.6. Articuler des savoirs issus de différentes disciplines afin de pouvoir résoudre un problème simple mais concret de gestion ou analyser un phénomène socio-économique.

AAS2. Adopter une démarche scientifique en développant un raisonnement rigoureux et en mobilisant des compétences analytiques spécifiques pour analyser des problèmes et des situations de management.

AAS2.1. Mener un raisonnement analytique rigoureux clair et structuré en appliquant des cadres conceptuels et des modèles scientifiquement fondés pour décrire et analyser un problème, tout en se situant dans un paradigme pertinent.

AAS2.2. Collecter, sélectionner et analyser les informations pertinentes selon les méthodes éprouvées de traitement statistique.

AAS2.3. Modéliser une situation concrète à l'aide de modèles scientifiquement fondés, de manière rigoureuse et réfléchie, en portant un regard critique sur les hypothèses de validité.

AAS2.4. Analyser et interpréter des résultats ou des propositions jusqu'à la critique argumentée pour un problème lié à la gestion.

AAS2.5. Faire preuve de discernement (validité et pertinence) dans la collecte des sources d'information et de précision dans leur référencement.

AAS2.6. Communiquer son analyse et ses résultats de manière professionnelle : concevoir et réaliser des présentations orales et des rapports professionnels en utilisant des logiciels spécialisés et en construisant des tableaux et graphiques pertinents, répondant aux standards scientifiques et techniques, en fonction des messages cibles à communiquer.

AAS2.7. Faire preuve de rigueur dans chacune des étapes de la démarche scientifique.

AAS3. Confronter différentes rationalités et logiques d'action pour comprendre et analyser un problème concret d'une organisation/entreprise.

AAS3.1. Comprendre le fonctionnement interne d'une organisation/entreprise de taille et de complexité limitée.

AAS3.2. Situer et comprendre ce fonctionnement dans son contexte socio-économique et discerner les enjeux interdisciplinaires.

AAS3.3. Mobiliser des savoirs interdisciplinaires (articuler des concepts de domaines différents et confronter des logiques d'action différentes), y compris technologiques et quantitatifs, pour comprendre et modéliser un problème concret d'une entreprise ou d'une organisation de taille et de complexité limitée.

AAS3.4. Utiliser des logiciels spécialisés de différents domaines pour résoudre un problème de gestion.

AAS3.5. Percevoir la réalité de travail dans une entreprise ou une organisation à travers un stage ouvrier/employé.

AAS4. Organiser et mener un projet collectif jusqu'à son terme en tenant compte des objectifs prédefinis et des contraintes qui caractérisent l'environnement du projet.

AAS4.1. Organiser le processus : planifier et élaborer en groupe, en fonction d'objectifs prédefinis, toutes les étapes d'un projet et s'y engager collectivement après avoir réparti les tâches.

AAS4.2. Contribuer à l'avancement du projet et au succès du groupe en partageant l'information et l'expertise en vue d'atteindre de manière efficace un objectif.

AAS4.3. Reconnaître et prendre en considération la diversité des points de vue des membres d'un groupe.

AAS4.4. Se projeter dans une dynamique de changement et faire preuve de créativité dans la proposition d'idées originales et utiles.

AAS5. Développer une posture d'acteur réflexif socialement responsable par la construction d'une prise de position personnelle argumentée et critique en regard de phénomènes socio-économiques, technologiques et environnementaux contemporains.

AAS5.1. Situer les débats et courants de pensée en sciences économiques et de gestion dans une perspective historique.

AAS5.2 S'exercer à développer un regard argumenté et critique, en adoptant une posture d'acteur socialement responsable, vis-à-vis de l'évolution des phénomènes socio-économiques, technologiques et environnementaux contemporains (entre autres, les impacts de processus de gestion, de production, technologiques, ainsi que d'innovation).

AAS5.3. Appréhender de manière critique les enjeux du 21<sup>e</sup> siècle, notamment les interrelations entre crises écologiques, sociales et économiques.

## Programme structure

The Bachelor's program in Business Engineering is a top-tier education designed to meet the challenges of the 21st century, combining science, technology, economics, and management. Its goal is to train innovative and responsible leaders who are essential to our economies, capable of managing complex human and technical systems at both national and international levels, within the context of ecological transition, digital transformation, and societal change.

The programme is organised in the form of one single line of studies of 180 credits, into which are integrated 30 credits in Sciences and Technology.

## INGE1BA Programme

### Detailed programme by subject

- Mandatory
- ❖ Optional
- △ Not offered in 2025-2026
- Not offered in 2025-2026 but offered the following year
- ⊕ Offered in 2025-2026 but not the following year
- △ ⊕ Not offered in 2025-2026 or the following year
- Activity with requisites
- Open to incoming exchange students
- ☒ Not open to incoming exchange students
- [FR] Teaching language (FR, EN, ES, NL, DE, ...)

Click on the course title to see detailed informations (objectives, methods, evaluation...)

Year  
1 2 3

#### Content:

##### Formation pluridisciplinaire en sciences humaines (18 credits)

● LECGE1102	Economic sociology [C]		FR [q1] [30h] [6 Credits]	x		
● LESPO1321	Economic, Political and Social Ethics [M]		EN [q2] [22.5h] [3 Credits]			x
● LECGE1217	History of Economic Theories [M]	Luca Pensiero	EN [q2] [22.5h] [3 Credits]			x

### ○ Cours au choix (6 credits)

1 parmi

☒ LBOE2191	Ecology and society [M]		FR [q2] [30h] [6 Credits]	x
☒ LGEO2110	Mondialisation, développement et environnement	Eric Lambin	FR [q1] [30h+30h] [6 Credits]	x

### ○ Economie (24 credits)

○ LECGE1108	Pratiquer l'économie (1) - Économie politique [C]		FR [q1] [45h+15h] [6 Credits]	x
○ LECGE1212	Macroeconomics  [M]	Fabio Mariani Francesca Monti	FR [q1 or q2] [45h+15h] [6 Credits]	x
○ LECGE1222	Microeconomics  [M]	Johannes Johnen François Maniquet	FR [q1 or q2] [45h+15h] [6 Credits]	x
○ LECGE1303	Digital economics [C]		EN [q1] [22.5h+30h] [6 Credits]	x

### ○ Gestion (36 credits)

○ LINGE1107	Financial accounting and analysis of financial statements [C]		FR [q2] [45h+15h] [6 Credits]	x
○ LINGE1126	Managing Organizations in the Era of Anthropocene (1) [C]		FR [q2] [15h+20h] [3 Credits]	x
○ LINGE1108	Marketing [C]		FR [q2] [30h+15h] [6 Credits]	x
○ LINGE1208	Principles and practice of management (2) [C]		EN [q2] [37.5h+15h] [9 Credits]	x
○ LINGE1226	Managing Organizations in the Era of Anthropocene (2) [C]		FR [q1] [45h] [3 Credits]	x
○ LINGE1308	Principles and practice of management (3a) [C]		EN [q1] [30h+15h] [6 Credits]	x
○ LINGE1326	Managing Organisations in the Era of Anthropocene (3) [C]		EN [q2] [52.5h+20h] [3 Credits]	x

### ○ Méthodes quantitatives (48 credits)

○ LINGE1113	Data analysis : Probability [M]		FR [q2] [30h+15h] [6 Credits]	x
○ LINGE1114	Introduction to mathematical modelling : analysis [M]		FR [q1] [30h+30h] [6 Credits]	x
○ LINGE1121	Introduction to mathematical modelling : algebra [M]		FR [q1] [30h+30h] [6 Credits]	x
○ LINGE1214	Further Statistics  [M]	Christian Hafner	FR [q1] [30h+15h] [6 Credits]	x
○ LINGE1216	Management Science: Deterministic models  [M]	Philippe Chevalier Mathieu Van Vyve	FR [q2] [30h+15h] [6 Credits]	x
○ LINGE1225	Programming in Economics and Management [M]	Marco Saerens	FR [q1] [30h+22.5h] [6 Credits]	x
○ LINGE1322	Finance and information system [M]		EN [q2] [30h+15h] [6 Credits]	x
○ LECGE1301	Analyse de données : nouvelles méthodes (Big Data, IA) [C]		FR [q1] [45h+20h] [6 Credits]	x

### ○ Sciences et technologie (30 credits)

○ LINGE1122	Physics and energy I [M]	Giacomo Bruno	FR [q2] [40h+20h] [6 Credits]	x
○ LINGE1115	Chemistry and environment I [M]	Yaroslav Filinchuk	FR [q1] [50h+10h] [6 Credits]	x
○ LINGE1213	Physics and energy II  [M]		FR [q1] [40h+30h] [3 Credits]	x
○ LINGE1223	Chemistry and environment II [M]	Jean-François Gohy	FR [q2] [50h+10h] [3 Credits]	x
○ LINGE1317	Research and technological development: energy, electronics and telecommunications  [M]	Francesco Contino Benoît Macq	FR [q1] [30h+7.5h] [6 Credits]	x
○ LINGE1327	Research and technological development: mechanical, chemical and materials  [M]		FR [q2] [30h+7.5h] [6 Credits]	x

### ○ Droit (6 credits)

○ LESPO1221	Droit, entreprise et fiscalité [C]		FR [q1] [45h] [6 Credits]	x
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### ○ Langues (15 credits)

#### ○ Deuxième langue étrangère

L'étudiant choisit et garde la même langue tout au long de son programme de bachelier

o Sciences religieuses (3 credits)

1 parmi:

☒ LTECO2201	Societies, cultures, religions : Biblical readings		PB [q2] [15h] [3 Credits]	☒	x
☒ LTECO2202	Societies-cultures-religions : Human Questions	Benoît Bourgine	PB [q1] [15h] [3 Credits]	☒	x
☒ LTECO2203	Societies, cultures, religions : Ethical questions		PB [q2] [15h] [3 Credits]	☒	x

## Course prerequisites

The **table** below lists the activities (course units, or CUs) for which there are one or more prerequisites within the programme, i.e. the programme CU for which the learning outcomes must be certified and the corresponding credits awarded by the jury before registering for that CU.

These activities are also identified **in the detailed programme**: their title is followed by a yellow square.

### Prerequisites and student's annual programme

As the prerequisite is for CU registration purposes only, there are no prerequisites within a programme year. Prerequisites are defined between CUs of different years and therefore influence the order in which the student will be able to register for the programme's CUs.

In addition, when the jury validates a student's individual programme at the beginning of the year, it ensures its coherence, meaning that it may:

- require the student to combine registration in two separate CUs which it considers necessary from a pedagogical point of view.
- transform a prerequisite into a corequisite if the student is in the final year of a degree course.

For more information, please consult the [Academic Regulations and Procedures](#).

### # Prerequisites list

**LECGE1212** "Macroéconomie" has prerequisite(s) LINGE1114

- LINGE1114 - Introduction to mathematical modelling : analysis

**LECGE1222** "Microéconomie" has prerequisite(s) LINGE1114

- LINGE1114 - Introduction to mathematical modelling : analysis

**LINGE1213** "Physique et énergie II" has prerequisite(s) LINGE1114

- LINGE1114 - Introduction to mathematical modelling : analysis

**LINGE1214** "Analyse de données : Statistiques" has prerequisite(s) LINGE1113

- LINGE1113 - Data analysis : Probability

**LINGE1216** "Management sciences : modèles déterministes" has prerequisite(s) LINGE1114

- LINGE1114 - Introduction to mathematical modelling : analysis

**LINGE1317** "Recherche et développement technologique : énergie, électronique et télécommunications" has prerequisite(s) LINGE1115 ET LINGE1122

- LINGE1115 - Chemistry and environment I

- LINGE1122 - Physics and energy I

**LINGE1327** "Recherche et développement technologique : mécanique, procédés chimiques et matériaux" has prerequisite(s) LINGE1115 ET LINGE1122

- LINGE1115 - Chemistry and environment I

- LINGE1122 - Physics and energy I

## The programme's courses and learning outcomes

For each UCLouvain training programme, a [reference framework of learning outcomes](#) specifies the skills expected of every graduate on completion of the programme. Course unit descriptions specify targeted learning outcomes, as well as the unit's contribution to reference framework of learning outcomes.

## Detailed programme per annual block

### INGE1BA - 1ST ANNUAL UNIT

● Mandatory

❖ Optional

△ Not offered in 2025-2026

○ Not offered in 2025-2026 but offered the following year

⊕ Offered in 2025-2026 but not the following year

△ ⊕ Not offered in 2025-2026 or the following year

■ Activity with requisites

● Open to incoming exchange students

☒ Not open to incoming exchange students

[FR] Teaching language (FR, EN, ES, NL, DE, ...)

Click on the course title to see detailed informations (objectives, methods, evaluation...)

o **Content:**

o **Formation pluridisciplinaire en sciences humaines**

o LECGE1102	Economic sociology [C]	<span style="background-color: #e0f2e0; border: 1px solid black; padding: 2px;">FR [q1] [30h] [6 Credits]</span>
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o **Economie**

o LECGE1108	Pratiquer l'économie (1) - Économie politique [C]	<span style="background-color: #e0f2e0; border: 1px solid black; padding: 2px;">FR [q1] [45h +15h] [6 Credits]</span>
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o **Gestion**

o LINGE1107	Financial accounting and analysis of financial statements [C]	<span style="background-color: #e0f2e0; border: 1px solid black; padding: 2px;">FR [q2] [45h +15h] [6 Credits]</span>
o LINGE1126	Managing Organizations in the Era of Anthropocene (1) [C]	<span style="background-color: #e0f2e0; border: 1px solid black; padding: 2px;">FR [q2] [15h +20h] [3 Credits]</span>
o LINGE1108	Marketing [C]	<span style="background-color: #e0f2e0; border: 1px solid black; padding: 2px;">FR [q2] [30h +15h] [6 Credits]</span>

o **Méthodes quantitatives**

o LINGE1113	Data analysis : Probability [M]	<span style="background-color: #e0f2e0; border: 1px solid black; padding: 2px;">FR [q2] [30h +15h] [6 Credits]</span>
o LINGE1114	Introduction to mathematical modelling : analysis [M]	<span style="background-color: #e0f2e0; border: 1px solid black; padding: 2px;">FR [q1] [30h +30h] [6 Credits]</span>
o LINGE1121	Introduction to mathematical modelling : algebra [M]	<span style="background-color: #e0f2e0; border: 1px solid black; padding: 2px;">FR [q1] [30h +30h] [6 Credits]</span>

o **Sciences et technologie**

o LINGE1122	Physics and energy I [M]	Giacomo Bruno	<span style="background-color: #e0f2e0; border: 1px solid black; padding: 2px;">FR [q2] [40h +20h] [6 Credits]</span>
o LINGE1115	Chemistry and environment I [M]	Yaroslav Filinchuk	<span style="background-color: #e0f2e0; border: 1px solid black; padding: 2px;">FR [q1] [50h +10h] [6 Credits]</span>

**INGE1BA - 2ND ANNUAL UNIT**

- Mandatory
- ❖ Optional
- △ Not offered in 2025-2026
- Not offered in 2025-2026 but offered the following year
- ⊕ Offered in 2025-2026 but not the following year
- △ ⊕ Not offered in 2025-2026 or the following year
- Activity with requisites
- Open to incoming exchange students
- ☒ Not open to incoming exchange students
- [FR] Teaching language (FR, EN, ES, NL, DE, ...)

Click on the course title to see detailed informations (objectives, methods, evaluation...)

**○ Content:****○ Economie**

● LECGE1212	Macroeconomics ■ [M]	Fabio Mariani Francesca Monti	FR [q1 or q2] [45h +15h] [6 Credits]
● LECGE1222	Microeconomics ■ [M]	Johannes Johnen François Maniquet	FR [q1 or q2] [45h +15h] [6 Credits]

**○ Gestion**

● LINGE1208	Principles and practice of management (2) [C]		EN [q2] [37.5h +15h] [9 Credits]
● LINGE1226	Managing Organizations in the Era of Anthropocene (2) [C]		FR [q1] [45h] [3 Credits]

**○ Méthodes quantitatives**

● LINGE1214	Further Statistics ■ [M]	Christian Hafner	FR [q1] [30h +15h] [6 Credits]
● LINGE1216	Management Science: Deterministic models ■ [M]	Philippe Chevalier Mathieu Van Vyve	FR [q2] [30h +15h] [6 Credits]
● LINGE1225	Programming in Economics and Management [M]	Marco Saerens	FR [q1] [30h +22.5h] [6 Credits]

**○ Sciences et technologie**

● LINGE1213	Physics and energy II ■ [M]		FR [q1] [40h +30h] [3 Credits]
● LINGE1223	Chemistry and environment II [M]	Jean-François Gohy	FR [q2] [50h +10h] [3 Credits]

**○ Droit**

● LESPO1221	Droit, entreprise et fiscalité [C]		FR [q1] [45h] [6 Credits]
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## ***INGE1BA - 3RD ANNUAL UNIT***

- Mandatory
- ❖ Optional
- △ Not offered in 2025-2026
- Not offered in 2025-2026 but offered the following year
- ⊕ Offered in 2025-2026 but not the following year
- △ ⊕ Not offered in 2025-2026 or the following year
- Activity with requisites
- Open to incoming exchange students
- ☒ Not open to incoming exchange students
- [FR] Teaching language (FR, EN, ES, NL, DE, ...)

Click on the course title to see detailed informations (objectives, methods, evaluation...)

### ● Content:

#### ● Formation pluridisciplinaire en sciences humaines

● LESPO1321	Economic, Political and Social Ethics [M]		EN [q2] [22.5h] [3 Credits] 
● LECGE1217	History of Economic Theories [M]	Luca Pensiero	EN [q2] [22.5h] [3 Credits] 

#### ● Cours au choix

1 parmi

☒ LBOE2191	Ecology and society [M]		FR [q2] [30h] [6 Credits] 
☒ LGEO2110	Mondialisation, développement et environnement	Eric Lambin	FR [q1] [30h +30h] [6 Credits] 

#### ● Economie

● LECGE1303	Digital economics [C]		EN [q1] [22.5h +30h] [6 Credits] △ 
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#### ● Gestion

● LINGE1308	Principles and practice of management (3a) [C]		EN [q1] [30h+15h] [6 Credits] △ 
● LINGE1326	Managing Organisations in the Era of Anthropocene (3) [C]		EN [q2] [52.5h +20h] [3 Credits] 

#### ● Méthodes quantitatives

● LINGE1322	Finance and information system [M]		EN [q2] [30h +15h] [6 Credits] 
● LECGE1301	Analyse de données : nouvelles méthodes (Big Data, IA) [C]		FR [q1] [45h +20h] [6 Credits] 

#### ● Sciences et technologie

● LINGE1317	Research and technological development: energy, electronics and telecommunications ■ [M]	Francesco Contino Benoit Macq	FR [q1] [30h +7.5h] [6 Credits] 
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● LINGE1327	Research and technological development: mechanical, chemical and materials  [M]		FR [q2] [30h +7.5h] [6 Credits] 
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● **Sciences religieuses**

1 parmi:

❖ LTECO2201	Societies, cultures, religions : Biblical readings		FR [q2] [15h] [3 Credits] 
❖ LTECO2202	Societies-cultures-religions : Human Questions	Benoit Bourgine	FR [q1] [15h] [3 Credits] 
❖ LTECO2203	Societies, cultures, religions : Ethical questions		FR [q2] [15h] [3 Credits] 

## INGE1BA - Information

### Access Requirements

*Decree of 7 November 2013 defining the landscape of higher education and the academic organization of studies.*

*The admission requirements must be met prior to enrolment in the University.*

**In the event of the divergence between the different linguistic versions of the present conditions, the French version shall prevail.**

#### SUMMARY

- General access requirements
- Specific access requirements
- Access based on validation of professional experience
- Special requirements to access some programmes

### General access requirements

Except as otherwise provided by other specific legal provisions, admission to undergraduate courses leading to the award of a Bachelor's degree will be granted to students with one of the following qualifications :

1. A Certificate of Upper Secondary Education issued during or after the 1993-1994 academic year by an establishment offering full-time secondary education or an adult education centre in the French Community of Belgium and, as the case may be, approved if it was issued by an educational institution before 1 January 2008 or affixed with the seal of the French Community if it was issued after this date, or an equivalent certificate awarded by the Examination Board of the French Community during or after 1994;
2. A Certificate of Upper Secondary Education issued no later than the end of the 1992-1993 academic year, along with official documentation attesting to the student's ability to pursue higher education for students applying for a full-length undergraduate degree programme;
3. A diploma awarded by a higher education institution within the French Community that confers an academic degree issued under the above-mentioned Decree, or a diploma awarded by a university or institution dispensing full-time higher education in accordance with earlier legislation;
4. A higher education certificate or diploma awarded by an adult education centre;
5. A pass certificate for one of the [entrance examinations](#) organized by higher education institutions or by an examination board of the French Community; this document gives admission to studies in the sectors, fields or programmes indicated therein;
6. A diploma, certificate of studies or other qualification similar to those mentioned above, issued by the Flemish Community of Belgium, the German Community of Belgium or the Royal Military Academy;
7. A diploma, certificate of studies or other qualification obtained abroad and deemed equivalent to the first four mentioned above by virtue of a law, decree, European directive or international convention;

#### Note:

Requests for equivalence must be submitted to the Equivalence department ([Service des équivalences](#)) of the Ministry of Higher Education and Scientific Research of the French Community of Belgium in compliance with the official deadline.

The following two qualifications are automatically deemed equivalent to the Certificate of Upper Secondary Education (Certificat d'enseignement secondaire supérieur – CESS):

- European Baccalaureate issued by the Board of Governors of a European School,
- International Baccalaureate issued by the International Baccalaureate Office in Geneva.

8. Official documentation attesting to a student's ability to pursue higher education (diplôme d'aptitude à accéder à l'enseignement supérieur - DAES), issued by the Examination Board of the French Community.

### Specific access requirements

- Access to bachelor programmes for candidates of nationality outside the European Union who are not assimilated to Belgian nationals is subject to the following criteria:

- not have obtained a secondary education diploma for more than 3 years maximum. Example: for an admission application for the academic year 2024-2025, you must have obtained your diploma during the academic years 2021-2022, 2022-2023 ou 2023-2024. In the French Community of Belgium, the academic year runs from September 14 to September 13
- not already hold an undergraduate degree

- Candidates, whatever their nationality, with a secondary school diploma **from a country outside the European Union**, must have obtained an average of 13/20 minimum or, failing that, have obtained this average, have passed one year of study in Belgium (for example special Maths / sciences). A non-successful year will not be taken into consideration.

- For any secondary school diploma **from a European Union country**, the admission request must contain the equivalence of your diploma or, at the very least, proof of the filing of the equivalence request with the Wallonia-Brussels Federation (French Community of Belgium). For any information relating to obtaining an equivalence, please refer to [the following site](#).
- For any secondary school diploma **from a country outside the European Union**, the admission application must contain the [equivalence of your diploma](#) issued by the Wallonia-Brussels Federation (French Community of Belgium). If you have a restrictive equivalence for the programme of your choice, in addition of it, you **must** have either the **DAES** or a certificate of successful completion of the [examination giving access to 1<sup>st</sup> cycle studies](#) when you submit your application

## Access based on validation of professional experience

Admission to undergraduate studies on the basis of accreditation of knowledge and skills obtained through professional or personal experience (Accreditation of Prior Experience)

Subject to the general requirements laid down by the authorities of the higher education institution, with the aim of admission to the undergraduate programme, the examination boards accredit the knowledge and skills that students have obtained through their professional or personal experience.

This experience must correspond to at least five years of documented activity, with years spent in higher education being partially taken into account: 60 credits are deemed equivalent to one year of experience, with a maximum of two years being counted. At the end of an assessment procedure organized by the authorities of the higher education institution, the Examination Board will decide whether a student has sufficient skills and knowledge to successfully pursue undergraduate studies.

After this assessment, the Examination Board will determine the additional courses and possible exemptions constituting the supplementary requirements for the student's admission.

## Special requirements to access some programmes

- Admission to **undergraduate studies in engineering: civil engineering and architect**

Pass certificate for the [special entrance examination for undergraduate studies in engineering: civil engineering and architect](#).

Admission to these courses is always subject to students passing the special entrance examination. Contact the faculty office for the programme content and the examination arrangements.

- Admission to **undergraduate studies in veterinary medicine**

[Admission to undergraduate studies in veterinary medicine is governed by the Decree of 16 June 2006 regulating the number of students in certain higher education undergraduate courses \(non-residents\)](#).

- Admission to **undergraduate studies in physiotherapy and rehabilitation**

[Admission to undergraduate studies in physiotherapy and rehabilitation is governed by the Decree of 16 June 2006 regulating the number of students in certain higher education undergraduate courses \(non-residents\)](#).

- Admission to **undergraduate studies in psychology and education: speech and language therapy**

[Admission to undergraduate studies in psychology and education: speech and language therapy is governed by the Decree of 16 June 2006 regulating the number of students in certain higher education undergraduate courses \(non-residents\)](#).

- Admission to **undergraduate studies in medicine and dental science**

[Admission to undergraduate studies in medicine and dental science is governed by the Decree of 16 June 2006 regulating the number of students in certain higher education undergraduate courses \(non-residents\)](#).

Note: students wishing to enrol for a **Bachelor's degree in Medicine** or a **Bachelor's degree in dental science** must first sit [an aptitude test \(fr\)](#).

- Access to **Bachelor of Science in Business Engineering**

The Bachelor of Science in Business Engineering is a joint program organised by KU Leuven and UCLouvain Saint-Louis Bruxelles. In order to register, all candidate must first submit an application via the [KU Leuven admission platform](#). The [conditions of access](#) to this programme are specific.

## Evaluation

**The evaluation methods comply with the regulations concerning studies and exams. More detailed explanation of the modalities specific to each learning unit are available on their description sheets under the heading "Learning outcomes evaluation method".**

Written and oral exams aim to assess the level of acquisition and mastery of the basic concepts, theories, data, and skills in the various disciplines concerned.

Some teaching activities are subject to continuous assessment through exercises and individual assignments.

The specific evaluation criteria for each activity are outlined in the course description sheet.

To obtain the final average, the marks obtained for the different activities are weighted according to their respective credits.

## Mobility and/or Internationalisation outlook

Mobility is provided at the master's level.

## Possible trainings at the end of the programme

### Positioning of the programme within the University cursus

The bachelor's degree entitles direct access to the following programmes:

- [Master \[120\] : Business Engineering \(Louvain-la-Neuve\)](#)
- [Master \[120\] : Business Engineering \(Mons\)](#)
- [Master \[120\] in Human Resources Management](#)
- [Master \[120\] in Management \(Mons\)](#)
- [Master \[60\] in Management \(Mons\)](#)
- [Master \[120\] in Management \(Louvain-la-Neuve\)](#)
- [Master \[60\] in Management \(Louvain-la-Neuve\)](#)
- [Master \[120\] in Economics: General](#)
- [Master \[60\] in Economics : General](#)
- [Master \[120\] in Data Science : Statistic](#)
- [Master \[120\] in Actuarial Science](#)
- [Master \[120\] in Economics: Econometrics](#)
- [Master \[120\] in Statistics: General](#)
- [Master \[120\] in Management \(with work-linked-training\)](#)
- [Master \[120\] in accounting and tax expertise \(with work-linked-training\) co-graduated with HELHa and Ephec](#)
- [Master \[120\] in Business Management co-graduated with ICHEC.](#)

## Other studies available upon completion of the programme

The bachelor's degree in Business Engineering entitles access to the master's organised by the other departments of the Faculty of Economics, Social and Political Sciences or by other Faculties, subject to respect of the conditions and prerequisites specified by the bodies responsible for organising the programme in question. In the case of lacking credits, these may be made up either by being added to the master's programme (if the number of lacking credits does not surpass 15), or by the completion of a complementary/preparatory programme before embarking on the master's.

Among the UCLouvain master's programs (generally "orphan" programs) that are widely accessible to UCLouvain bachelor's graduates, we can mention:

- [Master \[120\] in Population and Development Studies](#) (direct access for all bachelor's graduates),
- [Master \[120\] in European Studies](#) (direct access for bachelor's graduates with a minor in European studies; application review required for other bachelor's graduates),
- [Master \[120\] in Ethics](#) (accessible to all bachelor's graduates with a preparatory module),
- [Master \[120\] in Sciences of Religions](#) (accessible to all bachelor's graduates with a preparatory module).

## Contacts

### Curriculum Management

**Entity**

Structure entity	SSH/ESPO/SESP
Denomination	(SESP)
Faculty	Faculty of Economic, Social and Political Sciences and Communication ( <a href="#">ESPO</a> )
Sector	Human Sciences ( <a href="#">SSH</a> )
Acronym	SESP
Postal address	Place Montesquieu 1 - bte L2.08.08 1348 Louvain-la-Neuve Tel: <a href="tel:+3210474116">+32 (0) 10 47 41 16</a> - Fax: <a href="tel:+3210474561">+32 (0) 10 47 45 61</a>

Academic supervisor: [Philippe Grégoire](#)

**Jury**

- Président du jury: [Sébastien Van Belleghem](#)
- Secrétaire du jury: [Philippe Grégoire](#)

**Useful Contact(s)**

- Conseillère aux études: [Géraldine Carette](#)

